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09/881,621	06/14/2001	Mark S. Schladenhauffen	ALBR:0092 (01AB054)	8219

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Alexandar M. Gerasimow  
Allen-Bradley Company, LLC  
Patent Dept./704P, Floor 8 T-29  
1201 South Second Street  
Milwaukee, WI 53204-2496

EXAMINER

MOONEY, MICHAEL P

ART UNIT	PAPER NUMBER
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2883

DATE MAILED: 10/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/881,621

**Applicant(s)**

SCHLADENHAUFFEN ET AL.

**Examiner**

Michael P. Mooney

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-19,21-33,35-40,42 and 43 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,2,4-18,33 and 35-39 is/are allowed.
- 6) ☒ Claim(s) 19,21-27,30,40,42 and 43 is/are rejected.
- 7) ☒ Claim(s) 28,29,31 and 32 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 42 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Using the word "pattern" for the first time in the entire application in the text of claim 42 renders claim 42 indefinite because it is not clear what is met by pattern. Therefore, for the purposes of the rejection below, "pattern" in claim 42 will be broadly interpreted.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

**Claims 19, 21-27, 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cutler (6204501).**

Cutler teaches a protective cover for an enclosure [see green (nos. 18, 24, 30) in figure below infra.] including: a first surface region of the cover (see figure below infra.), the first surface region being oriented on a first side (see figure below infra.) of the enclosure; a second surface region (see figure below infra.) of the cover, the second surface region being oriented on a second side (see figure below infra.) of the enclosure; and a first portion (see figure below infra.) of the cover, the first portion being adapted to receive light from a light source (see figure below infra.)

Furthermore, Although Cutler does not explicitly state “and totally internally reflect the light to the first surface region and the second surface region”, it would have been obvious to do so because it is notoriously well known (NWK) that fiber(s) such as in the figure below totally internally reflect light. It is therefore clearly evident from the figure below that light is totally internally reflected to the first surface region and the second surface region. (see figure below infra.). Further, it is therefore clearly evident that a first portion of the light is totally internally reflected at the first surface region to the second surface region through the first portion of the cover (see figure below infra.).

Thus claim 19 is rejected.

Although Cutler does not explicitly state “wherein a second portion of the light is refracted at the first surface” it would have been obvious to do so because it is NWK that at interfaces between optical fibers (OFs) such as nos. 10 and 21 of Cutler there is

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a gap, such as an air gap, which has a refractive index not precisely identical to that of the fiber(s) and, hence, there is an inherent refraction of the light going into and out of the said gap due to the not precisely identical refractive index. (see figure below infra.). Thus claim 21 is rejected.

Cutler teaches wherein the first portion comprises an angled member (see orange in figure below infra.) extending from a third surface region (see purple in figure below infra.) of the cover. Thus claim 22 is rejected.

Cutler teaches a protective cover for an enclosure [see green (nos. 18, 24, 30) in figure below infra.] including: a first surface region of the cover (see figure below infra.), the first surface region being oriented on a first side (see figure below infra.) of the enclosure; a second surface region (see figure below infra.) of the cover, the second surface region being oriented on a second side (see figure below infra.) of the enclosure, wherein the first side of the enclosure is transverse to the second side of the enclosure (see figure below infra.); and a first portion (see figure below infra.) of the cover, the first portion being adapted to receive light from a light source (see figure below infra.)

Furthermore, Although Cutler does not explicitly state "and totally internally reflect the light to the first surface region and the second surface region", it would have been obvious to do so because it is notoriously well known (NWK) that fiber(s) such as in the figure below totally internally reflect light. It is therefore clearly evident from the figure below that light is totally internally reflected to the first surface region and the second surface region. (see figure below infra.).

Thus claim 23 is rejected.

Cutler teaches wherein the first side is opposite of the second side. (see figure below infra.). Thus claim 24 is rejected.

Cutler teaches a protective cover for an enclosure [see green (nos. 18, 24, 30) in figure below infra.] including: a first surface region of the cover (see figure below infra.), the first surface region being oriented on a first side (see figure below infra.) of the enclosure; a second surface region (see figure below infra.) of the cover, the second surface region being oriented on a second side (see figure below infra.) of the enclosure; and a first portion (see figure below infra.) of the cover, the first portion being adapted to receive light from a light source (see figure below infra.)

Furthermore, Although Cutler does not explicitly state "and totally internally reflect the light to the first surface region and the second surface region", it would have been obvious to do so because it is notoriously well known (NWK) that fiber(s) such as in the figure below totally internally reflect light. It is therefore clearly evident from the figure below that light is totally internally reflected to the first surface region and the second surface region. (see figure below infra.). Further, it is therefore clearly evident that a first portion of the light is totally internally reflected at the first surface region to the second surface region through the first portion of the cover (see figure below infra.).

Although Cutler does not explicitly state wherein the first surface region refracts the light "from the light source in a plurality of directions" it would have been obvious to do so because it is NWK that at interfaces between optical fibers (OFs) such as nos. 10

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and 21 of Cutler there is a gap, such as an air gap, which has a refractive index not precisely identical to that of the fiber(s) and, hence, there is an inherent refraction of the light going into and out of the said gap due to the not precisely identical refractive index. (see figure below infra.).

Furthermore, it is NWK that light exits a fiber in a plurality of directions because a plurality of waves exit a fiber which have different points around the periphery of the core in which the last total internal reflection (TIR) takes place. Thus the light exiting the fiber and entering the gap is refracted in a plurality of directions.

Furthermore, it has been held that the recitation that an element is “adapted to” perform a function is not a positive limitation but only requires the ability to so perform. it does not constitute a limitation in any patentable sense. *In re Hutchison*, 69USPQ 138.

Thus claim 25 is rejected.

Cutler teaches wherein the first surface region is adapted with a plurality of angled surface faces. (see figure below infra.). It is noted that the limitation “angled surface faces” does not specify a specific value for an angle nor does it state what the angle might be relative to. In the figure below, there are surface faces labeled “1<sup>st</sup> side” that are angled relative to something, e.g., the surface faces are angled at ninety degrees relative to the longitudinal direction of the fiber(s). (see figure below infra.). Thus claim 26 is rejected.

Cutler teaches wherein the first surface region comprises a smooth strip portion of the first surface region. (see figure below infra.). Thus claim 27 is rejected.

Cutler teaches wherein the enclosure receives a cable (e.g. the fiber cable 21), the cover having a guide portion adapted to guide the cable to a desired position within the enclosure and to secure the cable between cover and a portion of the enclosure. (see figure below infra.). Thus claim 30 is rejected.

**Claims 40, 42-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scott et al. (3576563).**

A method of providing visual information from an electronic device, comprising the acts of: producing light from a light source housed within a protective enclosure (Abstract; figs. 1-2, 11) of the electronic device, the light providing data from the electronic device (Abstract; figs. 1-2, 11); and adapting the electronic device to guide the light from the light source to a plurality of surface portions of the enclosure using total internal reflection to guide the light through a portion of a cover of the enclosure (Abstract; figs. 1-2, 11)

Although Scott et al. does not explicitly state "and to refract the light at the plurality of surface portions so that the light is visible from a plurality of sides of the enclosure" it would have been obvious to do so because it is notoriously well known that that the lens 34 distributes light such that it is visible from a position below the lower side of such a light distributor and the light would also be visible from the directly in front of the enclosure. Furthermore, it has been held that the recitation that an element is "adapted to" perform a function is not a positive limitation but only requires the ability to



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so perform. it does not constitute a limitation in any patentable sense. *In re Hutchison*, 69USPQ 138.

Additionally, Scott et al. teaches providing each of a plurality of light sources housed within the electronic device with a unique color. (Abstract).

Thus claim 40 is rejected.

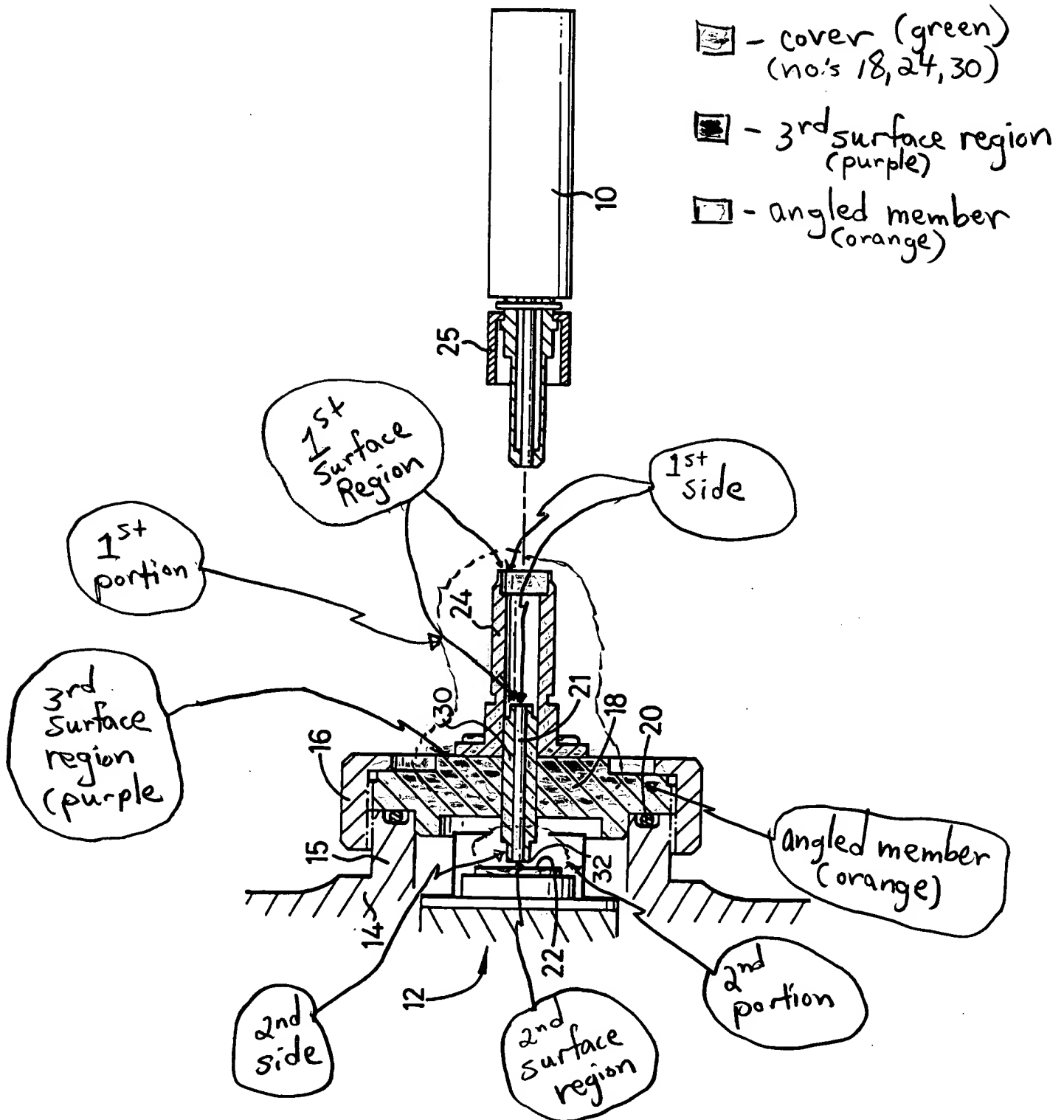
Although Scott et al. does not explicitly state "wherein adapting comprises refracting light in a different pattern at each of the plurality of surface portions" it would have been obvious to do so because it is NWK that the shape of the Fresnel-type lens shown at Scott et al. figure 2 and/or the fact the light incident on each of the plurality of surface portions of the lens comes at various angles to various plurality of surface portions ensures that the light is refracted in a different pattern at each of the plurality of portions. (figure 2). Thus claim 42 is rejected.

Although Scott et al. does not explicitly state "wherein adapting comprises molding the cover" it would have been obvious to do so because it is NWK to mold Fresnel-type lenses such as shown at Scott et al. figure 2. (figure 2). Thus claim 43 is rejected.

U.S. Patent

Mar. 20, 2001

US 6,204,501 B1



***Allowable Subject Matter***

Claims 1-18, 33, 35-39 are allowed.

The prior art, either alone or in combination, does not disclose or render obvious a protective housing; a light source disposed within the protective housing; and a cover secured to the protective housing to form a protective enclosure for the electronic device and to form a light guide for guiding a first portion of light from the light source to a first surface portion of the cover, a second surface portion of the cover being adapted to totally internally reflect the first portion of the light to the first surface portion, wherein the first surface portion comprises an inverted pyramid portion extending from a third surface portion of the cover in combination with the rest of claim 1.

It is noted that the claim 1 is allowable because the unique combination of each and every specific element stated in the claim.

The prior art, either alone or in combination, does not disclose or render obvious wherein the electronic device receives power via a cable inserted into the protective housing, the cover having a guide portion adapted to guide the cable to a desired position and to secure the cable between the protective housing and the cover as the cover is secured to the protective housing in combination with the rest of claim 9.

It is noted that the claim 9 is allowable because the unique combination of each and every specific element stated in the claim.

The prior art, either alone or in combination, does not disclose or render obvious a first portion adapted to cooperate with a protective housing to form a protective

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enclosure for the electronic device, the first portion having first and second exterior surface portions oriented at an angle to each other; and a second portion adapted to extend from the first portion to a position adjacent to a light source within the enclosure, wherein light from the light source is internally reflected through the second portion to the first and second exterior surfaces, further wherein the light from the light source is refracted at the first and second exterior surfaces in combination with the rest of claim 33.

It is noted that the claim 33 is allowable because the unique combination of each and every specific element stated in the claim.

Claims 28-29, 31-32 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art, either alone or in combination, does not disclose or render obvious an inverted pyramid in combination with the rest of claim 28 or 29.

It is noted that the claims 28, 29 are allowable because the unique combination of each and every specific element stated in each claim.

The prior art, either alone or in combination, does not disclose or render obvious wherein the guide portion is configured with a first serrated surface and a corresponding portion of the protective housing is configured with a second serrated surface, the first and second serrated surfaces being adapted for engagement when the cover is disposed on the protective housing in combination with the rest of claim 31.

It is noted that the claim 31 is allowable because the unique combination of each and every specific element stated in the claim.

The prior art, either alone or in combination, does not disclose or render obvious wherein the cover is adapted to totally internally reflect a plurality of colors of light from the light source in combination with the rest of claim 32.

It is noted that the claim 32 is allowable because the unique combination of each and every specific element stated in the claim.

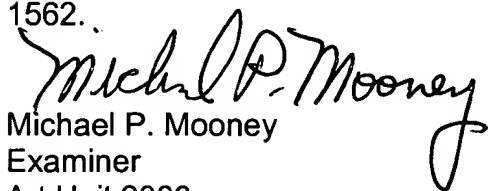
### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael P. Mooney whose telephone number is 571-272-2422. The examiner can normally be reached during weekdays, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank G. Font can be reached on 571-272-2415. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-

1562.

  
Michael P. Mooney  
Examiner  
Art Unit 2883

  
Frank G. Font  
Supervisory Patent Examiner  
Art Unit 2883

FGF/mpm  
10/13/04

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